

IN THE CLAIMS:

Please cancel Claims 8, 9, 18, 19, 28, 29, 38, 39 and 41 to 45 without prejudice or disclaimer of subject matter, and amend Claims 1 to 4, 11 to 14, 21 to 24 and 31 to 34 as shown below. The claims, as pending in the subject application, now read as follows:

1. (Currently amended) An information processing apparatus for generating print data to output print material wherein a plurality of pages output from an application are arranged in a plurality of areas in which a front surface and a back surface of a sheet are respectively segmented ~~segmenting a sheet into a plurality of areas and arranging print data in each of the plurality of areas~~, comprising:

sorting means for sorting the plurality of pages into front surface pages to be arranged on the front surface of the sheet and back surface pages to be arranged on the back surface of the sheet based on the output form of the plurality of pages output from the application;

setting means for, in a case where the sheet is cut into the plurality of areas, determining the front surface pages and back surface pages to be arranged on the front surfaces and the back surfaces of the plurality of areas as cut, and setting arranged positions of the determined pages for the front surfaces of the plurality of areas as cut and the determined pages for the back surfaces of the plurality of areas as cut; and

generating means for generating the print data based on the arranged positions set by said setting means to output the print material such that the plurality of pages are arranged in the plurality of areas on the front surface and the back surface of the sheet,

wherein the front surface pages are arranged on the front surface of the sheet and the back surface pages are arranged on the back surface of the sheet, in consecutive order, respectively

~~print setting means for setting print settings;~~

~~input means for inputting a plurality of sets of data arranged on the plurality of areas from an application, each set of data being print data corresponding to front and back surfaces of each area;~~

~~determination means for determining whether a surface which undergoes an imposition process is to be at the front or back surface;~~

~~page order setting means for setting the page-layout order on the surface of one sheet determined by the determination means such that, in a case where the sheet is cut into the plurality of areas, each set of data is arranged on the front and back surfaces of each cut area;~~  
and

~~imposition process means for performing the imposition process, on the basis of the page-layout order set by said page order setting means, by separately collecting page data for the front and back surfaces of the sheet and respectively laying out the print data on the front and back surfaces of the sheet.~~

2. (Currently amended) The apparatus according to claim 1, wherein, when all back surface pages are output after all front surface pages are output from the application, the all front surface pages and the all back surface pages are sorted into the front surface pages and the back surface pages based on a number of pages arranged on the front surface and back surface of the sheet, and when a front surface page and a back surface page are alternately output from the

~~application, the front surface page and the back surface page are alternately sorted said determination means automatically determines the front or back surface by either a format in which all the data of back surfaces is outputted after all the data of front surfaces is outputted, or a format in which data of the front or back surface of a set is alternately outputted, which is designated from the application in 2 sided printing.~~

3. (Currently amended) The apparatus according to claim 1, further comprising print setting means for setting print setting information on processing for the front surface or the back surface of the sheet as designated by a user ~~wherein said print setting means has designation means for allowing a user to designate processing for the front or back surface, and said determination means performs the determination on the basis of the user designation by said designation means.~~

4. (Currently amended) The apparatus according to claim 1 [[3]], wherein the output form of the plurality of pages output from the application is designated by the application ~~said determination means automatically determines the front or back surface by communicating with the application by using an extension application programming interface.~~

5. (Previously presented) The apparatus according to claim 1, wherein when a layout that is always uniquely determined by a specific type of sheet is to be made, and the specific type of sheet is designated, a print setting GUI is controlled so as not to make any setting that influences the layout.

6. to 9. (Canceled)

10. (Previously presented) The apparatus according to claim 1, further comprising spool means for, before generating print data to be transmitted to a printer, temporarily storing the print data in an intermediate code form of a data form different from a data form of the print data, despool means for generating the print data to be transmitted to the printer from the data temporarily stored in the intermediate code form, and means for generating a control command to the printer.

11. (Currently amended) A print control method for an information processing apparatus for generating print data to output print material wherein a plurality of pages output from an application are arranged in a plurality of areas in which a front surface and a back surface of a sheet are respectively segmented ~~segmenting a sheet into a plurality of areas and arranging print data in each of the plurality of areas~~, comprising:

a sorting step of sorting the plurality of pages into front surface pages to be arranged on the front surface of the sheet and back surface pages to be arranged on the back surface of the sheet based on the output form of the plurality of pages output from the application;

a setting step of, in a case where the sheet is cut into the plurality of areas, determining the front surface pages and back surface pages to be arranged on the front surfaces and the back surfaces of the plurality of areas as cut, and setting arranged positions of the determined pages for the front surfaces of the plurality of areas as cut and the determined pages for the back surfaces of the plurality of areas as cut; and

a generating step of generating the print data based on the arranged positions set by said setting step to output the print material such that the plurality of pages are arranged in the plurality of areas on the front surface and the back surface of the sheet,

wherein the front surface pages are arranged on the front surface of the sheet and the back surface pages are arranged on the back surface of the sheet, in consecutive order, respectively

~~a print setting step of setting print settings;~~

~~an input step of inputting a plurality of sets of data arranged on the plurality of areas from an application, each set of data being print data corresponding to front and back surfaces of each area;~~

~~a determination step of determining whether a surface which undergoes an imposition process is to be at the front or back surface;~~

~~a page order setting step of setting a page-layout order on the surface of one sheet determined by the determination step such that, in a case where the sheet is cut into the plurality of areas, each set of data is arranged on the front and back surfaces of each cut area; and~~

~~an imposition process step of performing the imposition process<sub>2</sub> on the basis of the page-layout order set in the page setting step, by separately collecting page data for the front and back surfaces of the sheet and respectively layout out the print data on the front and back surfaces of the sheet.~~

12. (Currently amended) The method according to claim 11, wherein, when all back surface pages are output after all front surface pages are output from the application, the all front surface pages and the all back surface pages are sorted into the front surface pages and the

back surface pages based on a number of pages arranged on the front surface and the back surface of the sheet, and when a front surface page and a back surface page are alternately output from the application, the front surface page and the back surface page are alternately sorted~~in the determination step, the front or back surface is automatically determined by either a format in which all the data of back surfaces is outputted after all the data of front surfaces is outputted, or a format in which data of the front or back surface of a set is alternately outputted, which is designated from the application in 2 sided printing.~~

13. (Currently amended) The method according to claim 11, further comprising a print setting step of setting print setting information on processing for the front surface or the back surface of the sheet as designated by a user ~~wherein the print setting step has a designation step of allowing a user to designate processing for the front or back surface, and in the determination step, the determination is performed on the basis of the user designation in the designation step.~~

14. (Currently amended) The method according to claim 11 [[13]], wherein the output form of the plurality of pages output from the application is designated by the application ~~in the determination step, the front or back surface is automatically determined by communicating with the application by using an extension application programming interface.~~

15. (Previously presented) The method according to claim 11, wherein when a layout that is always uniquely determined by a specific type of sheet is to be made, and the

specific type of sheet is designated, a print setting GUI is controlled so as not to make any setting that influences the layout.

16. to 19. (Canceled)

20. (Previously presented) The method according to claim 11, further comprising a spool step of, before generating print data to be transmitted to a printer, temporarily storing the print data in an intermediate code form of a data form different from a data form of the print data, a despool step of generating the print data to be transmitted to the printer from the data temporarily stored in the intermediate code form, and a step of generating a control command to the printer.

21. (Currently amended) A computer readable storage medium on which is stored a computer-executable program for a print control method for an information processing apparatus for generating print data to output print material wherein a plurality of pages output from an application are arranged in a plurality of areas in which a front surface and a back surface of a sheet are respectively segmented ~~segmenting a sheet into a plurality of areas and arranging print data in each of the plurality of areas~~, the program comprising including:

a sorting module for sorting the plurality of pages into front surface pages to be arranged on the front surface of the sheet and back surface pages to be arranged on the back surface of the sheet based on the output form of the plurality of pages output from the application;

a setting module for, in a case where the sheet is cut into the plurality of areas, determining the front surface pages and back surface pages to be arranged on the front surfaces and the

back surfaces of the plurality of areas as cut, and setting arranged positions of the determined pages for the front surfaces of the plurality of areas as cut and the determined pages for the back surfaces of the plurality of areas as cut; and

a generating module for generating the print data based on the arranged positions set by said setting step to output the print material such that the plurality of pages are arranged in the plurality of areas on the front surface and the back surface of the sheet,

wherein the front surface pages are arranged on the front surface of the sheet and the back surface pages are arranged on the back surface of the sheet, in consecutive order, respectively

~~a module for generating a control command to a printer;~~

~~a print setting module for setting print settings;~~

~~an input module for inputting a plurality of sets of data arranged on the plurality of areas from an application, each set of data being print data corresponding to front and back surfaces of each area;~~

~~a determination module for determining whether a surface which undergoes an imposition process is to be at the front or back surface;~~

~~a page order setting module for setting a print-layout order on the surface of one sheet determined by the determination module such that, in a case where the sheet is cut into the plurality of areas, each set of data is arranged on the front and back surfaces of each cut area;~~  
~~and~~

~~an imposition process module for performing the imposition process, on the basis of the page-layout order set by said page order setting module, by separately collecting page data~~



for the front and back surfaces of the sheet and respectively laying out the print data on the front and back surfaces of the sheet.

22. (Currently amended) The medium according to claim 21, wherein, when all back surface pages are output after all front surface pages are output from the application, the all front surface pages and the all back surface pages are sorted into the front surface pages and the back surface pages based on a number of pages arranged on the front surface and the back surface of the sheet, and when a front surface page and a back surface page are alternately output from the application, the front surface page and the back surface page are alternately sorted~~the determination module automatically determines the front or back surface by either a format in which all the data of back surfaces is outputted after all the data of front surfaces is outputted, or a format in which data of the front or back surface of a set is alternately outputted, which is designated from the application in 2 sided printing.~~

23. (Currently amended) The medium according to claim 21, further comprising a print setting module for setting print setting information on processing for the front surface or the back surface designated by a user~~wherein the print setting module has a designation module for allowing a user to designate processing for the front or back surface, and the determination module performs the determination on the basis of the user designation by the designation module.~~

24. (Currently amended) The medium according to claim 21 ~~[[23]]~~, wherein the output form of the plurality of pages output from the application is designated by the application

~~determination module automatically determines the front or back surface by communicating with the application by using an extension application programming interface.~~

25. (Previously presented) The medium according to claim 21, wherein when a layout that is always uniquely determined by a specific type of sheet is to be made, and the specific type of sheet is designated, a print setting GUI is controlled so as not to make any setting that influences the layout.

26. to 29. (Canceled)

30. (Previously presented) The medium according to claim 21, further comprising:

a spool module for, before generating print data to be transmitted to a printer, temporarily storing the print data in an intermediate code form of a data form different from a data form of the print data; and

a despool module for generating the print data to be transmitted to the printer from the data temporarily stored in the intermediate code form.

31. (Currently amended) A computer-executable program stored in a computer-readable storage medium, the program causing a computer to execute a print control method for an information processing apparatus for generating print data to output print material wherein a plurality of pages output from an application are arranged in a plurality of areas in which a front surface and a back surface of a sheet are respectively segmented ~~segmenting a sheet into a~~

~~plurality of areas and arranging print data in each of the plurality of areas, the program~~

~~comprising:~~

~~a sorting step of sorting the plurality of pages into front surface pages to be arranged on the front surface of the sheet and back surface pages to be arranged on the back surface of the sheet based on the output form of the plurality of pages output from the application;~~

~~a setting step of, in a case where the sheet is cut into the plurality of areas, determining the front surface pages and back surface pages to be arranged on the front surfaces and the back surfaces of the plurality of areas as cut, and setting arranged positions of the determined pages for the front surfaces of the plurality of areas as cut and the determined pages for the back surfaces of the plurality of areas as cut; and~~

~~a generating step of generating the print data based on the arranged positions set by said setting step to output the print material such that the plurality of pages are arranged in the plurality of areas on the front surface and the back surface of the sheet,~~

~~wherein the front surface pages are arranged on the front surface of the sheet and the back surface pages are arranged on the back surface of the sheet, in consecutive order, respectively~~

~~a step of generating a control command to a printer;~~

~~a print setting step of setting print settings;~~

~~an input step of inputting a plurality of sets of data arranged on the plurality of areas from an application, each set of data being print data corresponding to front and back surfaces of each area;~~

~~a determination step of determining whether a surface which undergoes an imposition process is to be at the front or back surface;~~

~~a page order setting step of setting the page-layout order on the surface of one sheet determined by the determination step such that, in a case where the sheet is cut into the plurality of areas, each set of data is arranged on the front and back surfaces of each cut area; and~~

~~an imposition process step of performing the imposition process, on the basis of the page-layout order set in the page order setting step, by separately collecting page data for the front and back surfaces of the sheet and respectively laying out the print data on the front and back surfaces of the sheet.~~

32. (Currently amended) The program according to claim 31, wherein, when all back surface pages are output after all front surface pages are output from the application, the all front surface pages and the all back surface pages are sorted into the front surface pages and the back surface pages based on a number of pages arranged on the front surface and the back surface of the sheet, and when a front surface page and a back surface page are alternately output from the application, the front surface page and the back surface page are alternately sorted in the determination step, the front or back surface is automatically determined by either a format in which all the data of back surfaces is outputted after all the data of front surfaces is outputted, or a format in which data of the front or back surface of a set is alternately outputted, which is designated from the application in 2 sided printing.

33. (Currently amended) The program according to claim 31, further comprising a print setting step of setting print setting information on processing for the front surface or the back surface as designated by a user wherein the print setting step has a designation step of

~~allowing a user to designate processing for the front or back surface, and in the determination step, determination is performed on the basis of the user designation in the designation step.~~

34. (Currently amended) The program according to claim 31 ~~[[33]]~~, wherein the output form of the plurality of pages output from the application is designated by the application ~~determination step automatically determines the front or back surface by communicating with the application by using an extension application programming interface.~~

35. (Previously presented) The program according to claim 31, wherein when a layout that is always uniquely determined by a specific type of sheet is to be made, and the specific type of sheet is designated, a print setting GUI is controlled so as not to make any setting that influences the layout.

36. to 39. (Canceled)

40. (Previously presented) The program according to claim 31, wherein the program further comprises:

a spool step of, before generating print data to be transmitted to a printer, temporarily storing the print data in an intermediate code form of a data form different from a data form of the print data, and

a despool step of generating the print data to be transmitted to the printer from the data temporarily stored in the intermediate code form.

41. to 45. (Canceled)